AI Assignment 2: Question 4

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1) Model 2 always reduces the variable domain more than the other; in other words, it is more effective in pruning the variable domains.

2) Model-1 requires 810 constraints and Model-2 requires 27 constraints.

3) Model-1 will have (9 x 7) = 72 satisfying tuples for each constraint and Model-2 will have 9! = 362 880 satisfying tuples for each constraint.

4) Model-1 requires 466 560 bytes to represent the constraints arising from the initially empty board; similarly, Model-2 requires 352 719 360 bytes.